Attachment 2

Summary of Water Quality Data for the Spring Creek Debris Dam, January 3, 1996 through January 31, 2000

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Water Quality Data
Spring Creek Debris Dam

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This technical memorandum provides a summary of water quality data for the Spring Creek Debris Dam (SCDD) discharge compiled for the period January 1, 1996 through January 31, 2000. The U.S. Bureau of Reclamation (Reclamation) conducts weekly sampling of SCDD discharges at the SCDD outlet works and tests the samples at the Reclamation testing lab located near Keswick dam. Reclamation has provided this data to EPA. CH2M HILL has compiled the data in conjunction with an EPA work assignment (WA 25) for the Iron Mountain Mine project.

Water samples obtained from the SCDD outlet are tested for pH, total copper, and total zinc. Because of the low pH, the total copper and zinc concentrations are typically equal to the dissolved concentrations. As shown in Table 1, metal concentrations discharged from SCDD vary as a function of flow into Spring Creek Reservoir. During low inflow conditions, typically from June through November, inflow into the reservoir is less than 50 cfs. During these periods the SCDD discharge has an average pH of 3.86 and has total copper and total zinc concentrations equal to 0.72 mg/l and 1.29 mg/l. During higher inflow conditions, above 50 cfs, the SCDD discharge has an average pH of 4.38 and has total copper and total zinc concentrations equal to 0.41 mg/l, and 0.63 mg/l.

TABLE 1
Water Quality Data : January 3,1996 through January 31, 2000
Spring Creek Debris Dam

	pH	Total Copper (mg/l)	Total Zinc (mg/l)
SCDD Inflow < 50 cfs			
No. of Samples	167	160	160
Max	4.80	1.45	4.36
Min	3.00	0.22	0.44
Avg	3.86	0.72	1.29
SCDD Inflow > 50 cfs			
No. of Samples	49	50	45
Max	5.00	1.12	1.73
Min	3.60	0.10	0.09
Avg	4.38	0.41	0.63